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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/936,514 | 09/14/2001 | Takeya Abe | 018793-253 | 4410 |

7590 10/04/2007
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| EXAMINER |
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FRONDA, CHRISTIAN L

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| ART UNIT | PAPER NUMBER |
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1652

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| MAIL DATE | DELIVERY MODE |
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10/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/936,514

Applicant(s)

ABE ET AL.

Examiner

Christian L. Fronda

Art Unit

1652

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07/18/2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

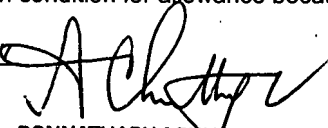
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1,3,9,11-16 and 25-31.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 07/18/07
13. ☐ Other: _____.


PONNATHAPUAACHUTHAMURTHY
SUPERVISORY PATENT EXAMINER
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Continuation of 3. NOTE:

Applicants' amendment filed 07/18/2007 has been considered but not entered because it raises new issues that would require further considerations and/or search. The amendment has not been entered for the following reasons stated below. The new limitation of acidic conditions from pH of 3.5 to 6.5 filed in the amendment dated 07/18/2007 would require an additional search in the patent and no-patent literature and would require further consideration.

The arguments and amendments filed 07/18/2007 are not persuasive and does not overcome the rejection under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. As stated in the previous Office Action, the specification discloses a MT-10827 (FERM BP-5785) which is not a not a fungus, but is instead an E.coli host cell transformed with a plasmid containing a polynucleotide encoding a bacterial nitrile hydratase from *Pseudonocardia thermophila* JCM3095 (see US Patent 5,910,4352), and its use in converting acrylonitrile to its corresponding amide acrylamide. The specification does not disclose representative species of this genus of nitrile hydratases for which one skilled in the art can predict and visualize or recognize the identity of the other members of the genus.

The arguments and amendments filed 07/18/2007 are not persuasive and does not overcome the rejection under 35 U.S.C. 103(a) as being unpatentable over Oriel et al. (WO 99/55719; reference of record) in view of Chen. (J Biol Chem. 1967 Jan 25;242(2):173-81; reference of record). In response to applicants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). One of ordinary skill in the art at the time the invention was made would have been motivated to modify the process of Oriel et al. such that the amide solution is subjected to acid-charcoal treatment as taught by Chen for the purposes of having a simple and beneficial purification process that produces an amide compound and removes impurities such as lipid impurities. The modified teachings of Oriel et al. stated in the previous Office Action dated 03/25/2005 would remove proteins since the BR449 cells which are contacted with acrylonitrile to produce a solution containing acrylamide are separated from the reaction mixture, the said acrylamide solution is treated with activated charcoal (an activated carbon), to remove contaminants and the acrylamide is concentrated or precipitated by distillation or evaporation under reduced pressure.

Applicants argue that the methods of the Oriel et al. reference are not conducive to removing contaminating proteins having a higher boiling point than that of the amide compound set forth in the claimed method. However, this limitation is not recited in the claims, and the combination of references does not need to disclose this particular limitation..